National Park Service U.S. Department of the Interior

Jamaica Bay Institute Gateway National Recreation Area



# Performing Environmentally-Sensitive and Safe Field Research in Gateway National Recreation Area

A Guide for Research Scientists

#### **Gateway as a Place for Research**



Gateway National Recreation Area is a unique place that offers research opportunities available at few other places. Situated among the most populated city in the United States, Gateway encompasses a variety of rich landscapes and habitat types from tidal marshes, upland forests and complex dune systems to freshwater and brackish ponds. Due to their location, these habitats are highly susceptible to degradation and the effects of urbanization.

Each year, dozens of researchers study Gateway's resources, visitor demographics and experiences, park use, and cultural and subsistence resources. Approximately 70 to 100 projects are underway (or on-going) each year. Studies range widely. A sample of current projects include: Breeding bird behavior as it relates to grassland management at Floyd Bennett Field; Effects of environmental contaminants in depurated bivalve mollusks exposed to landfill leachates; Consequences of urbanization on the belowground structure and soil respiration and a number of research projects relating to the restoration of marsh habitat.



Research permits are required to conduct research or collect specimens in National Park Service areas. Scientists must submit an application and a study proposal providing adequate detail about the projects and requests for any park assistance for permit consideration. To learn more about park research, or to obtain a research permit, please contact Jamaica Bay's Research Administrator at 718-338-3338 ext. 222 or email Kim\_Tripp@nps.gov. You may also visit the National Park Service website and review the permit application information given there: <a href="http://science.nature.nps.gov/research">http://science.nature.nps.gov/research</a>.

Research that minimizes negative impacts on resources or visitor experience, yet gathers important and/or critical information is highly encouraged. Findings may be especially valued by park managers who need to make science-based decisions.

For guidance in crafting a research proposal (study plan) to submit to the Research Permit and Reporting System website along with the application, please refer to the handout "Are You Thinking of Conducting Research in Gateway National Recreation Area?"

A scientific research permit may allow scientists to do things that the average visitor is prohibited from doing in a national park. With special permissions, come special responsibilities.

# **Minimizing Impacts while Conducting Research**

#### Travel Light

Use public transportation whenever possible to reduce fuels use, and traffic effects on wildlife. If you intend to park in areas other than public parking spaces request a road permit for a private or government vehicle. You will need to provide justification for this request to be considered. Bicycles may be the better alternative in some cases. For transportation information please visit <a href="http://www.mta.info/">http://www.mta.info/</a>.



# Be prepared

Make sure you have all necessary field gear before leaving your vehicle on a park road. Excessive trips between the park road and your study site create unwanted social trails.

## Walk and walk softly

As you walk, spread your research party out (unless you are on a designated trail), so the impacts of walking on marsh or other fragile habitats will be minimized. Choose durable surfaces for walking whenever possible.

#### Minimize impacts

If you will need to return to your study site multiple times over the course of the season, or from season to season, vary your travels to the same site or within the same site, to avoid adding social trails.

Take care not to trample plants or soils at your work site.

Avoid backtracking along the edge of a plot, or transect. If you will be kneeling or working in one area for some time, consider placing a mat or other protective surface to minimize impacts. Consider flagging or other temporary markers in colors to blend into the surrounding landscape and always remove these items when they are no longer necessary.

# Leave what you find

Do not collect any items unless your research permit authorizes you to do so. If you find something that you think the park should know about, take photographs, record the location, and leave the item in situ. You can report finds to the Research Administrator.

# Collect discretely

If your permit includes approved collections, respect others by collecting samples in a manner not obvious to visitors or at a time when visitors are not present. If you do encounter visitors, take the time to explain what you are doing. Spread out your collections of soils, leaves, branches to minimize the visual or biological impacts to your sampling.

# Avoid or minimize mechanized/motorized equipment in wilderness

Use of mechanized/motorized equipment is not suitable for many areas. Use of this type of equipment and setting up of any equipment for extended periods must be described in the application and approved in the research permit before you use it or store it in the field.

#### Reduce effects of digging holes

If you are approved to dig soil pits or to make other ground disturbances of any depth, use a tarp to collect the diggings and replace the soil as best you can in the layers in which they existed. Make it look as if you hadn't dug a hole!

## "Leave No Trace"

Use "Leave No Trace" practices.

To obtain a camping *permit* for research purposes, contact the research administrator. Check on a map, which campground you wish to camp in, so you can request an administrative permit for those areas (what days, how many people, how long). Pack out what you pack in.

When leaving your field site, be sure to check the area for garbage or trash of any kind, including small wrappers, twist ties, tags, pens, etc. To learn more about following the standard "Leave No Trace" principles, see www.LNT.org or call 1-800-332-4100.



# Keep wildlife wild

Do not approach or harass wildlife. If you cause an animal to change its behavior, you are too close. In general, keep more than 25 yards from all wildlife.

Do not feed the wildlife unless specified in permit (i.e. baiting traps, etc...).

## Wear Researcher Tags in plain view

It is crucial that research tags are prominently displayed at all times while conducting field work. This lets park staff, other agencies and visitors know that you hold a permit and are allowed to be where you are and doing what you're doing.



# Adhere to special park-specific or project-specific conditions

Note the specific conditions of your Research and Collecting Permit for any other special considerations.

# **Staying Safe while Conducting Research in Gateway**

Personal safety and park resources always take priority over your research. Make personal safety and the safety of other visitors and wildlife your first priority. It is important to plan ahead and be prepared for emergencies.

#### Have a safety plan

Develop a safety plan and file it with a friend, colleague, or the research administrator. This plan may be as simple as agreeing to check-in with the research administrator when you are finished and are leaving the park (which you should do anyway). Arrange to call someone if you will be in a remote area or have special concerns. Stick to your schedule or communicate any changes that occur.

#### Never work alone

Arrange for field assistants to help. If enough notice is given, staff at Gateway or the Jamaica Bay Institute may be able to offer some field assistance.

# Stay out of closured areas

Closures are marked with signs, written in the park guidelines or specified on your permit. Always remain on the trails unless specified in the permit. If you have any questions as to which areas are open to the public please call the appropriate district for assistance.

Breezy Point District 718-318-4300 North Shore District 718-338-3799 or 5094

Wildlife Refuge District 718-318-4340

#### Be aware of the weather

Gateway National Recreation Area is located along the ocean which can experience quick and severe changes in weather and take researchers by surprise. Check the weather when planning your field research as well as on the day of. Be prepared to be flexible in cases of extreme weather.

#### Be aware of the water

If you're taking the JBI Research Vessel or other water craft out, please be aware of tides, water conditions and submerged hazards. Watch for rip tides and rip currents. Always wear the appropriate personal protective gear.

# **Drive safely**

Please obey traffic signs and signals throughout the park. US Park Police enforce rules and regulations in the park and will issue tickets if violations occur.

Use caution when driving on sandy roads. To avoid getting stuck it may be necessary to drive at increased speeds. Keep in mind that traffic goes both ways on a road wide enough for one vehicle.

#### Park safely

If you plan on parking in areas other than public lots be sure to obtain a dashboard display pass from the Research Administrator in addition to your research permit. This will alert visitors to your special permissions as a researcher, and will alert park staff in the event you are reported overdue.

#### Stay safe for summer work

Humidity, heat and ticks are an issue in Gateway during summer months. Take along plenty of water, sun protection and insect repellent. Be aware of the signs of heat exhaustion and heat stroke. Bug spray and head nets may be helpful during mosquito season.

#### Stay safe for winter work

Cold weather may all be concerns for winter field work. Be prepared. Take the proper precautions to avoid hypothermia or frost bite, especially when working in or around wet climates.

#### Adhere to park hours of operation

Please try to conduct research during hours of operation unless absolutely necessary. Hours outside of normal operation should be clearly stated in the permit.

#### Prevent contamination

If you are involved with a boat, automobile, or aircraft, store and pour fuels safely so there are no contaminations of waters. Store fuels in approved containers.

Never release any chemicals into ponds, bays, oceans, streams, or onto the ground. Save in a container approved for use, and discard appropriately outside the park.

In case of an emergency, please call US Park Police Dispatch at: 718-338-3988 or 718-338-3993